

542, 128

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



13 JUL 2005



(43) International Publication Date
10 September 2004 (10.09.2004)

PCT

(10) International Publication Number
WO 2004/075842 A2

- (51) International Patent Classification⁷: **A61K**
- (21) International Application Number:
PCT/US2004/005335
- (22) International Filing Date: 24 February 2004 (24.02.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/450,071 25 February 2003 (25.02.2003) US
- (71) Applicant (for all designated States except US):
DANA-FARBER CANCER INSTITUTE, INC.
[US/US]; 44 Binney Street, Boston, MA 02115 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHEN, Lan Bo**
[US/US]; 184 East Emmerson Road, Lexington, MA
02420 (US). **AUCLAIR, Daniel** [CA/US]; 2 Alonquin
Trail, Ashland, MA 01721 (US).
- (74) Agent: **FRASER, Janis, K.**; Fish and Richardson P.C.,
225 Franklin Street, Boston, MA 02110-2804 (US).
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished
upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: MRP3 GENES AND USES THEREOF

(57) Abstract: A nucleic acid capable of driving the expression of a reporter gene in a cancer cell line is disclosed. A polypeptide able to confer multidrug-resistance on a cell is disclosed. Also disclosed are nucleic acids encoding the polypeptide, expression vectors, transformant host cell lines expressing the polypeptide, and antibodies binding to the polypeptide. Screening, diagnostic and treatment methods using the above polypeptide, nucleic acids, antibodies and host cell lines are also within the scope of this invention.

WO 2004/075842 A2